Friends of Harford endorses strong water source protection. We have been lobbying for this legislation for years. The following code is better than none, but does not go far enough to protect our drinking water. While we do understand that property owners have rights to use their land, we also must realize that water is a necessity for life. Harford County is situated in an area of plentiful water resources. This led to an attitude of unconcern about the availability of drinking water. Recent events - drought, MTBE, Perryman TCE plumes causing well shutdowns have all combined to wake the county to the fact that water must be protected from harm and without its protection, development will cease.

§267-66. Water Source Protection Districts

A. Purpose and Intent. Harford County recognizes that the provision of a safe drinking water supply is essential to maintaining the public health, safety, and the quality of life within the community. These standards protect high-quality; low-cost water for domestic, municipal, commercial, and industrial needs for the users of Harford County, and protect local resources. Water source protection areas in Harford County include the Perryman Wellfield, community water systems and nontransient water systems as mapped by the Maryland Department of the Environment. The areas surrounding these water supplies contribute not only water to the supply source, but also HAVE the potential for CONTRIBUTING contaminants that result from land use activities. These areas are referred to as "contributing areas". Activities occurring within the contributing areas may impact the water sources at varying time frames, therefore necessitating different requirements for each contributing area. The goals of these standards are:

(1) Protect the quality and quantity of the groundwater and surface water that provide drinking water to the general public, and

(2) Manage land use and development activities within the contributing areas in a manner that sustains the quality and quantity of the water source for the long term, and

(3) Foster environmentally sensitive development within the contributing areas by setting forth standards that prevent negative impacts and by establishing mitigation measures that minimize the likelihood that the water sources will be impacted.

B. Applicability. In order to carry out the provisions of this Subsection, districts have been established. The Department of Planning and Zoning shall maintain a map delineating the location of these sources as designated by Maryland Department of the Environment. In conjunction with existing zoning regulations and districts, the requirements of this Section shall apply to all development and redevelopment within the contributing areas for the following districts:

(1) Perryman Wellfield District
(2) Community Water System Districts
(3) Nontransient Noncommunity Water System Districts

C. General Regulations.

(1) Prohibited Uses

(a) The following uses are considered to pose a high risk to groundwater and surface water and shall be prohibited within all watersource protection districts:

[1] New or expanded mining or quarry activities;
[2] New or expanded sanitary landfills and rubble landfills;
[3] New or expanded hazardous waste collection, transfer or disposal facilities;
[4] Class V injection wells;
[5] New underground storage tanks (UST); this restriction applies to any tank or combination of tanks of any size, including underground pipes connected to the tank, where 10% or more of the combined volume of the pipes and tank(s) is underneath the surface. This includes tanks regulated by the Maryland Department of the Environment (MDE) through Code of Maryland Regulations (COMAR) 26.10.02 and unregulated tanks (e.g. farm or residential less than 1,100 gallons). It does not include the following:

[a] A storage tank located in an underground area such as a basement, if the storage tank is located on or above an impervious surface such as a concrete floor THAT HAS NO FLOOR DRAINS OR SUMP PUMP;

FOH: Care must be taken to contain spills. Occasionally, common sense needs to be spelled out.

[b] Wastewater collection systems; or

[c] Stormwater management facilities

[6] Surface impoundments, ponds, or lagoons. Except for stormwater detention and retention ponds and ponds used for recreational or landscaping purposes;

[7] Manufacturing and production of paving, roofing, and other construction materials using petroleum-based coating and preserving materials; and

[8] Dumping of snow from outside the Water Source Protection District.

[9] Bulk storage of hazardous materials except as follows:

[a] Materials needed for normal household use;

[b] Waste oil retention facilities required by statue, rule, or regulation;

[c] Materials needed for emergency generators.

[d] Materials used in Water Treatment Plants.

[10] Motor vehicle repair shops and motor vehicle filling and service stations.

[11] Junk yards.

[12] Dry cleaning establishments.

[13] Metal plating establishments.

[14] Miscellaneous chemical storage or manufacturing.

[15] Petroleum refining.

[16] Lubricating oils and greases.

[17] Offal or dead animal disposal or processing services.

[18] SYNTHETIC FIBER PRODUCTION.

[19] PULP PLANTS.

[20] INDUSTRIAL CHEMICAL MANUFACTURING AND/OR PROCESSING

[21] POLYMER AND RESIN MANUFACTURING AND/OR PROCESSING

[22] FERTILIZER MANFACTURE AND DISTRIBUTION

[23] PETROLEUM, COAL, RUBBER AND PLASTIC MANUFACTURE PROCESSING AND DISTRIBUTION

[24] TANNING

[25] VEHICLE FILLING STATIONS

[26] UNDERGROUND PIPELINES CARRYING HAZARDOUS MATERIAL

[27] BULK STORAGE OF DEICING CHEMICALS

[28] DISPOSAL OF ANY HAZARDOUS MATERIALS

[29] OPEN BURNING

[30] ANY ACTIVITY INVOLVING AS A PRINCIPAL ACTIVITY THE MANUFACTURE, STORAGE, USE OR DISPOSAL OF HAZARDOUS MATERIALS OR THAT IS PROSCRIBED BY THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT

(2) Exemptions

(a) The following activities are exempt from regulation under this subsection:

[1] Transportation of hazardous materials.

[a] The transportation of hazardous materials shall be exempt from the provisions of this subsection PROVIDING THE TRANSPORTATION IS THROUGH TRANSIT THAT DOES NOT INCLUDE REGULAR LAYOVERS OR MORE THAN INCIDENTAL STOPPAGE.

FOH: Extreme care needs to be taken here.

[2] Application of herbicides and pesticides.

[a] The application of herbicides and pesticides associated with recreation, agriculture, pest control, roadside maintenance, and aquatic weed control shall be exempt from the provisions of this subsection provided that:

[i] The application is completed in strict conformity with the use requirements as set forth in the EPA substance registries. Herbicides and pesticides can only be used according to its labeling and according to pertinent federal and state laws.

[ii] The application of herbicides and pesticides shall be noted in the records of an applicator certified by the Maryland Department of Agriculture. Records shall be kept of the date and the amount of these substances applied at each location and said records shall be available for inspection.

D. Perryman Wellfield Protection District

(1) Application. The Perryman Wellfield Protection District is divided into 3 zones based on groundwater travel time and as designated on the Harford County Source Water Assessment Areas Map.

(a) Zone 1 represents the area bounded by a groundwater travel time of 0 to 3 years.

(b) Zone 2 represents the area bounded by a groundwater travel time FROM 4 up to 20 years; and

(c) Zone 3 represents the area bounded by a groundwater travel time greater than 20 years.

(2) Impervious Surface Limitations

(a) New impervious surfaces shall be prohibited within 100 feet of all County owned wells within the district.

(b) For all new non-residential development and redevelopment within the Perryman Wellfield Protection District, the amount of impervious surface shall be limited to ~~50%.~~

FOH: 50% of any parcel within 100 feet of the wellhead strikes us as inordinately large. It makes no sense to allow more impervious because the zoning is non-residential. Impervious is impervious no matter the use.

Zone 1 must have more recharge area. We suggest the following impervious surface chart for both residential and non-residential:
Zone 1 – up to 15% impervious
Zone 2 – up to 20% impervious
Zone 3 – up to 25% impervious

Prohibited activities in Zone 1 and 2 will be:

[1] Tobacco manufacture
[2] Furniture and wood treatment
[3] Bulk biological product manufacture, processing, storage, disposal and distribution
[4] Bulk medical chemicals, botanical products and biological waste treatment product manufacture, processing, storage, disposal and distribution.
[5] Fabrication of metals, machinery, electrical, electronic, transportation and miscellaneous products
[6] Commercial dry cleaning and carpet cleaning

~~[1] Existing lots of record with impervious surface coverage of 50% or greater shall minimize the amount of impervious surface associated with the redevelopment of the site. In no case shall the amount of new impervious surface exceed 75% 50% or the amount of impervious surface currently on the site, whichever is less.~~

FOH: This refers strictly to redevelopment areas. It already states here that some parcels may have greater than 50% coverage. We should not allow more impervious coverage than already exists in the name of redevelopment when the matter of one's drinking water should take precedence.

(c) For residentially zoned parcels the amount of impervious surface shall be limited to the following:

[1] On undeveloped lots new impervious surfaces shall not exceed 25% of the parcel or lot. However if the lot of record is ½ acre or less in size, the amount of impervious surface may exceed the 25% limit by 25% or 500 square feet whichever is greater.

[2] The redevelopment or expansion of existing residential uses on lots of record shall be permitted provided they do not exceed the 25% limit on impervious surfaces except as provided in Paragraph [3] below.

[3] Existing lots of record having impervious surface coverage of 25% or more may increase the amount of impervious surface on site by 500 square feet.

[4] For new residential subdivisions, impervious surfaces may not exceed 25% of the overall development.

(d) Hydraulic connectivity shall be maintained between impervious surfaces.

(3) Stormwater Management

(a) For all new development and redevelopment, stormwater management shall be designed to minimize the impact of pollutants to the wellfield.

(b) Natural Resource District areas and significant/special natural features shall be preserved.

(c) Stormwater management systems shall mimic, as closely as possible, the runoff process of the site in its natural state. This shall include, at a minimum, natural storage, infiltration, and pollutant filtering functions.

[1] Grass swales, vegetated filter strips, bioretention, constructed stormwater wetlands, sand filters, and closed sand filters shall be used where possible.

[2] Runoff from service stations, towing and vehicle storage areas, PARKING AREAS FOR GREATER THAN 4 CARS and maintenance areas with gasoline pumps shall not be infiltrated.

FOH: Parked cars leak too many pollutants for water safety,e.g., fuel, hydraulic fluids, coolants, deicing chemicals, miscellaneous other fluids.

(d) All new development and redevelopment on non-residentially zoned lands shall:

[1] Meet the requirements for stormwater management as specified in Section 214 of the Harford County Code;

[2] Meet the requirement for stormwater management as detailed in Stormwater Management Activities: Developing Pollution Prevention Plans and Best Management Practice (U.S. EPA ~~1992~~ 2002);

[3] Meet the requirements of COMAR 26.08.01 Industrial Surface Water Discharge Permits;

[4] Provide stormwater management systems that capture and pretreat the stormwater runoff from all impervious areas;

[5] Design and install stormwater ENVIRONMENTAL SITE DESIGN (ESD) AND Best Management Practice (BMPs)as an integrated system. BMPs shall be used sequentially in the wellfield protection districts to provide an effective treatment hierarchy. In applying a treatment hierarchy, priority shall be given to implementing the following approaches:

[a] Impervious surfaces shall be minimized where appropriate. Certain sites shall require impervious surfaces to act as containment areas for toxic and hazardous materials;

[b] CONTAMINATED Runoff shall be pretreated before entering a stormwater facility or before it is channeled to an infiltration facility;

[c] UNCONTAMINATED Flows shall be attenuated in vegetated swales and bioretention storage areas;

[d] UNCONTAMINATED Runoff shall be infiltrated on site, depending on the soil characteristics of the site ~~and the quality of the runoff~~; and

[e] Excess stormwater shall be managed by detention and/or retention devices.

FOH: Runoff can be contaminated or not; treatment varies on which condition exists.

(e) All new development and redevelopment on residentially zoned lands shall:

(1) Meet the requirements for stormwater management as specified in Section 214 of the Harford County Code;

(2) Stormwater best management practices shall be designed and installed as an integrated system. ESD and BMPS shall be used sequentially to provide an effective treatment hierarchy. In applying a treatment hierarchy, priority shall be given to implementing the following approaches:

[a] Impervious surfaces shall be minimized where appropriate;

[b] UNCONTAMINATED Runoff shall be infiltrated on site, depending on the soil characteristics of the site ~~and the quality of the runoff~~;

[c] UNCONTAMINATED Flows shall be attenuated in vegetated swales and bioretention storage areas; and

[d] Excess stormwater shall be managed by detention and/or retention devices.

(4) Above Ground Storage Tanks

(a) Above ground storage tanks associated with non-residential uses are allowed, provided they meet the requirements of COMAR 26.10.02.12.

(b) New above ground storage tanks for residential heating fuel shall be allowed in all zones provided that the tank is:

[1] Located on an impervious pad ~~or~~ AND HAVE A container of sufficient volume to capture and contain spills and leakage;

[2] Sheltered to prevent the intrusion of precipitation; and

[3] Located so as to allow for routine visual inspections for leaks.

(c) All above ground storage tanks shall be located at least 100 feet from all County wells.

(5) Landscaping Standards. Landscaping shall be provided consistent with the standards set forth in §267-29 (Landscaping).

E. Community Water System Protection District

(1) Applicability. The Community Water System Protection District applies to those recharge areas designated as Community Water Systems on the Harford County Source Water Assessment Areas Map.

FOH: Community Water systems as well as F. Nontransient Noncommunity Water System Protection Area should receive identical protection as the Perryman wellhead area. One source of drinking water should not be regulated differenly from another. We suggest these two be moved up directly under D.

~~(2) Impervious Surface Limitations~~

~~(a) New impervious surfaces shall be prohibited within 100 feet of all community wells.~~

~~(b) The amount of impervious surface for all new non-residential development shall be limited to 50% of the parcel or lot.~~

~~[1] Existing lots of record with impervious surface coverage of 50% or greater shall minimize the amount of impervious surface associated with the redevelopment of the site. In no case shall the amount of new impervious surface exceed 75% or the amount of impervious surface currently on the site, whichever is less.~~

~~(c) For residentially zoned parcels the amount of impervious surface shall be limited to the following:~~

~~[1] On undeveloped lots new impervious surfaces shall not exceed 25% of the parcel or lot. However if the lot of record is one-half acre or less in size, the amount of impervious surface may exceed the 25% limit by 25% or 500 square feet whichever is greater.~~

~~[2] The redevelopment or expansion of existing residential uses on lots of record shall be permitted provided they do not exceed the 25% limit on impervious surfaces except as provided in Paragraph [3] below.~~

~~[3] Existing lots of record having impervious surface coverage of 25% or more may increase the amount of impervious surface on site by 500 square feet.~~

~~[4] For new residential subdivisions, impervious surfaces may not exceed 25% of the overall development.~~

~~(d) Hydraulic connectivity shall be maintained between impervious surfaces.~~

~~(3) Stormwater Management~~

~~(a) For all new development and redevelopment stormwater management shall be designed to minimize the impact of pollutants to the wellfield.~~

~~(b) Natural Resource District areas and significant/special natural habitats shall be preserved.~~

~~(c) Stormwater management systems shall mimic, as closely as possible, the runoff process of the site in its natural state. This shall include at a minimum natural storage, infiltration, and pollutant filtering functions;~~

~~[1] Grass swales, vegetated filter strips, bioretention, constructed stormwater wetlands, sand filters, and closed sand filters shall be used where possible.~~

~~[2] Runoff from service stations, towing and vehicle storage areas, and maintenance areas with gasoline pumps shall not be infiltrated.~~

~~(d) All new development and redevelopment shall:~~

~~[1] Meet the requirements for stormwater management as specified in Section 214 of the Harford County Code.~~

~~(4) Landscaping Standards. Landscaping shall be provided consistent with the standards set forth in §267-29 (Landscaping).~~

~~(5) Above Ground Storage Tanks.~~

~~(a) All new above ground storage tanks shall be located at least 100 feet from all Community wells.~~

~~(b) New above ground storage tanks shall be:~~

~~[1] Located on an impervious pad or container of sufficient volume to capture and contain spills and leakage;~~

~~[2] Sheltered to prevent the intrusion of precipitation; and~~

~~[3] Located so as to allow for routine visual inspections for leaks.~~

F. Nontransient Noncommunity Water System Protection Area

(1) Applicability. The Nontransient Noncommunity Water System Protection District applies to those recharge areas designated as Nontransient Noncommunity Water Systems on the Harford County Source Water Assessment Areas Map.

~~(2) Prohibit new impervious surfaces within 100 feet of wells.~~

~~(3) Stormwater management requirements, as specified in Section 214 of the Harford County Code, shall be met. The use of Stormwater Credits for Innovative Site Planning, in the 2000 Maryland Stormwater Management Design Manual, Volumes I and II, shall be used to the greatest extent practicable.~~

~~(4) New above ground storage tanks shall be:~~

~~(a) Located on an impervious pad or container of sufficient volume to capture and contain spills and leakage;~~

~~(b) Sheltered to prevent the intrusion of precipitation; and~~

~~(c) Located so as to allow for routine visual inspections for leaks.~~

~~G. Variances. The Board may grant a variance to Subsections (C) or (D) upon a finding by the Board that the proposed development will not adversely affect the Water Source Protection District. Prior to rendering approval, the Board shall request advisory comments from the Zoning Administrator, the Harford County Health Department, the Department of Public Works, and the Maryland Department of the Environment.~~

FOH: No variances should be allowed in any Water Source Protection District for any reason. Fouled drinking water should not be tolerated today.